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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/517,156	08/02/2005	Bernd Erhardt	3926.116	5697
30448	7590	10/12/2006	EXAMINER	
AKERMAN SENTERFITT P.O. BOX 3188 WEST PALM BEACH, FL 33402-3188			LARSON, LOWELL A	
			ART UNIT	PAPER NUMBER
			3725	
DATE MAILED: 10/12/2006				

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/517,156	<b>Applicant(s)</b> ERHARDT ET AL.	
	<b>Examiner</b> Lowell A. Larson	<b>Art Unit</b> 3725	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE THREE MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 18 to 34 is/are pending in the application.  
     4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 18 to 34 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 December 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
     a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>12/15/2005</u> . | 6) <input type="checkbox"/> Other: ____.  |

## DETAILED ACTION

### *Specification*

1. The disclosure is objected to because of the following informalities: Reference to the claims for disclosure in Paragraphs [0002], [0006], [00015] and [00016] is improper.

Appropriate correction is required.

### *Claim Rejections - 35 USC § 103*

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 18 to 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over de Smet in view of Palmer.

De Smet discloses deforming a sheet in which ribs 40 (Figure 8) are shaped in a perpendicularly extending edge, and advises that the number, distribution and dimension of such ribs may be determined so as to absorb excess material generated as a result of the deformation. See column 6, lines 11 to 22. One skilled in the art would understand that the de Smet ribs effect correction of the sheet geometry, as required by these claims, since excess material in the flange edge of the deformed sheet would result in warping and distortion of the product. Finding an optimum distribution, dimension and number of such ribs by routine experimentation for any particular deformed sheet profile, and the provision of corresponding rib-forming reliefs 29 in the forming tool 25 (see Figure 3), would be obvious to one skilled in the art

following the suggestion of de Smet. Furthermore, using an implement such as that of Palmer for the formation of prototype ribs for the optimization of the number, distribution and dimension of the ribs would have been obvious to one having ordinary mechanical skill, since the use of tools to facilitate shaping metal sheets is a well known expedient.

4. Claims 32 to 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Valek et al. in view of Rehbein.

Valek et al. discloses a deformation tool with stamps 26, 28 and die plates 32, 34 having die profiles for forming geometry-correcting ribs 18 in a preformed sheet article. Valek et al. does not disclose the die profiles as being releasable inserts.

Rehbein disclosed rib-forming dies in which the die elements are provided as inserts, such as inserts 10, 17 in Figure 5. It would have been obvious to one having ordinary skill in the art to provide the rib-forming dies of Valek et al. as inserts in the die holders 26, 28, 32, 34, following the suggestion of Rehbein, in order to facilitate the formation of different rib dimensions in preformed sheet products.

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

6. Claims 29 to 31 are rejected under 35 U.S.C. 102(b) as being anticipated by Palmer.

Palmer discloses a tool with carrier body 4 and adjustment element 11 having complementary deformation inserts 13, 17 in the manner required by these claims. A particular process in which the tool may be utilized is not relevant in claims to the tool itself.

***Claim Rejections - 35 USC § 112***

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claims 18 to 34 are further rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

It is not clear what "performing a sheet" as recited in Claims 18, 29 and 32 would require.

No clear antecedent basis is found for "the at least two" in Claim 23. In Claims 27 and 28 "in particular" and in Claim 33 "optionally" fail to distinctly point out the invention since is not clear when these claims would be infringed.

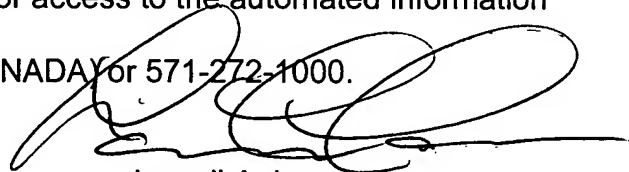
***Conclusion***

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Stull further shows a rib-forming tool.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lowell A. Larson whose telephone number is (571) 272-4519. The examiner can normally be reached from M-F 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Derris Banks can be reached at (571) 272-4419. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

A handwritten signature in black ink, appearing to read 'Lowell A. Larson', is written over the end of the previous paragraph.

Lowell A. Larson  
Primary Examiner  
Art Unit 3725

LAL  
September 29, 2006